



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)
(b)(6)

SUBJ: EPA Asbestos Removal at 229 Eden Street

Dear (b)(6):

Enclosed, you will find the Removal Action Status Report for the property located at 229 Eden Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Property Address: 229 Eden Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were collected at a depth of 0 to 3 inches below ground surface (bgs) and subsurface soil samples were collected at a depth of 3 to 6 inches bgs. Analytical results are reported in increments of 0.25 percent asbestos. Those samples with analytical results reported as “trace” (less than 0.25 percent asbestos) were further analyzed by fluidized bed analysis and reported in soil concentrations of phase contrast microcopy equivalent (PCME) structures per gram (s/g).

Property Address	Area Sampled	Surface Soil Results (percent asbestos) 0-3 inches deep	Subsurface Soil Results (percent asbestos) 3-6 inches deep
229 Eden Street	Vacant Lot	0.0 s/g	4.0

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: lawn to 36 inches and tree line areas to 3 inches (see Appendix 1). Visual inspections of the areas excavated for asbestos-containing materials (ACM) were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present, except along the base of the driveway and the street to prevent destabilization of their foundations. Once ACM was no longer visibly present throughout the main portion of the excavated area, restoration was allowed to commence. The visible, remaining ACM was photographed and documented in the site logbook before restoration began.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted at four stationary locations during removal activities from July 24 through July 25, 2017. Air sampling was conducted daily at two of those locations as weather permitted and based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.00032 fibers per cubic centimeter (f/cc) to less than 0.0019 f/cc (See Appendix 2). A 22-point composite soil sample was collected from the excavated areas before to restoration began and the analytical result detected a soil concentration of 0.75 percent chrysotile asbestos.

Perimeter air and composite soil samples were conducted by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included installation of snow fencing and red “Danger Asbestos” tape on top of the subsurface of the excavated area to identify the depth of excavation and the presence of ACM, backfill, topsoil, and sod in the excavated lawn areas, and snow fencing and red “Danger Asbestos” tape around the tree line to identify the depth of removal and the presence of ACM along with breathable plastic sheeting, topsoil, and mulch. All areas were restored to the original height of the surrounding grade.

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Time Frame of Removal Action: Removal activities began on July 24, 2017, and were completed on July 27, 2017.

Appendices to this report include:

1. Figure of removal area and air sampling locations
2. Table of air sampling results
3. Photographic log of removal activities

APPENDIX 1

FIGURE

(One Page)



Legend

- ◆ Air Sample
- Removal Area
- Parcel Boundary
- Approximate Site Boundary

Inset Map

- Parcels with Removal Activities
- Building/Structure



0 25 50
Feet

Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, <http://maps.co.mecklenburg.nc.us>



United States
Environmental Protection Agency
Region 4

FIGURE 1

Removal Areas and
Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City: Davidson County: Mecklenburg State: North Carolina



Date:
9/21/2017
Analyst:
dale.vonbusch

229 Eden Street

APPENDIX 2

SUMMARY TABLE OF ANALYTICAL RESULTS

(One Page)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-229ES-AA-L01-072417	229 Eden Street - Location 1	AA	G4	9:18	16:17	419	10.66	10.64	10.65	4462.4	0.0019	0	<0.0019
DA-229ES-AA-L02-072417	229 Eden Street - Location 2	AA	G3	9:25	16:20	415	10.73	10.58	10.66	4421.8	0.0011	0	<0.0011
DA-229ES-AA-L03-072517	229 Eden Street - Location 3	AA	G4	8:16	15:25	429	9.85	9.64	9.75	4180.6	0.00064	0	<0.00032
DA-229ES-AA-L04-072517	229 Eden Street - Location 4	AA	G6	8:18	15:29	431	9.74	9.53	9.64	4152.7	0.0025	0	<0.00083

Notes:

<: Less than
AA: Area air sampling
DA: Davidson Asbestos
ES: Eden Street
f/cc: Fibers per cubic centimeter
Id: Identification

l: Liters
lpm: Liters per minute
Min: Minutes
PCM: Phase contrast microscopy
PCME: Phase contrast microscopy equivalent
TEM: Transmission electron microscopy

APPENDIX 3
PHOTOGRAPHIC LOG
(Nine Pages)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: July 24, 2017

Photographer: Paul Prys, Tetra Tech, Inc. (Tetra Tech)

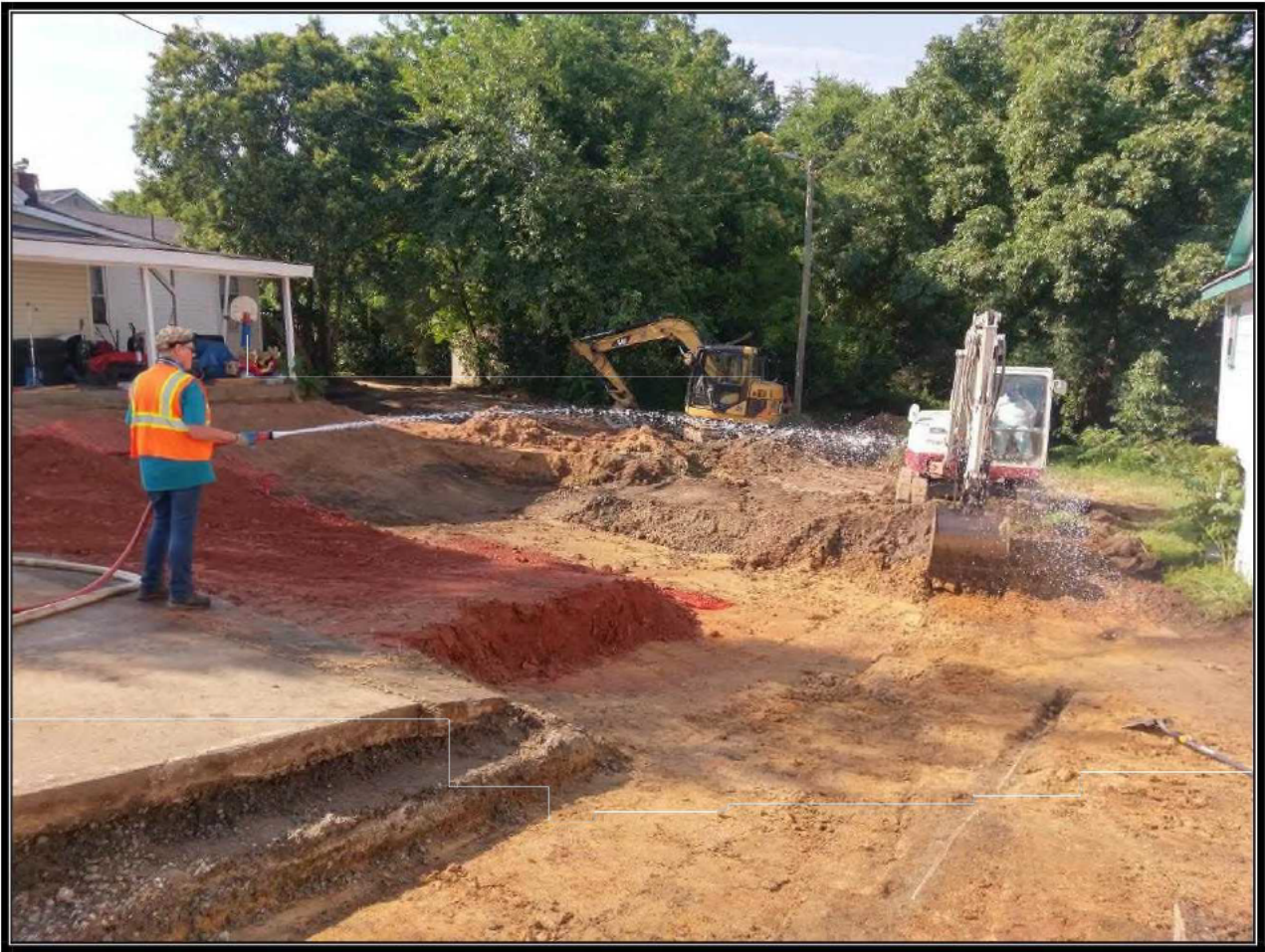
Witness: None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the property located at 229 Eden Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	Location:	Davidson Asbestos
Orientation:	Not applicable	Date:	July 24, 2017
Photographer:	Paul Prys, Tetra Tech, Inc. (Tetra Tech)	Witness:	None
Subject:	Heavy concentrations of ACM were visible at this property during removal activities. ER used hoses to wet the ACM and asbestos-contaminated soil during removal activities.		



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	Location:	Davidson Asbestos
Orientation:	Southeast	Date:	July 25, 2017
Photographer:	Paul Prys, Tetra Tech, Inc. (Tetra Tech)	Witness:	None
Subject:	ER used hoses to wet the ACM and asbestos-contaminated soil during removal activities.		



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Northeast

Date: July 24, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: A Tetra Tech Superfund Technical Assessment and Response Team (START), State of North Carolina-accredited asbestos inspector and air monitor, visually inspected the excavated areas for the presence of visible ACM. ER removed additional soil in those areas where ACM were still visibly present, except along the base of the driveway and the street to prevent destabilization of their foundations.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Not applicable

Date: July 26, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: A Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor, visually inspected the excavated areas for the presence of visible ACM. ER removed additional soil to a maximum depth of 36 inches from those areas where ACM were still visibly present.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

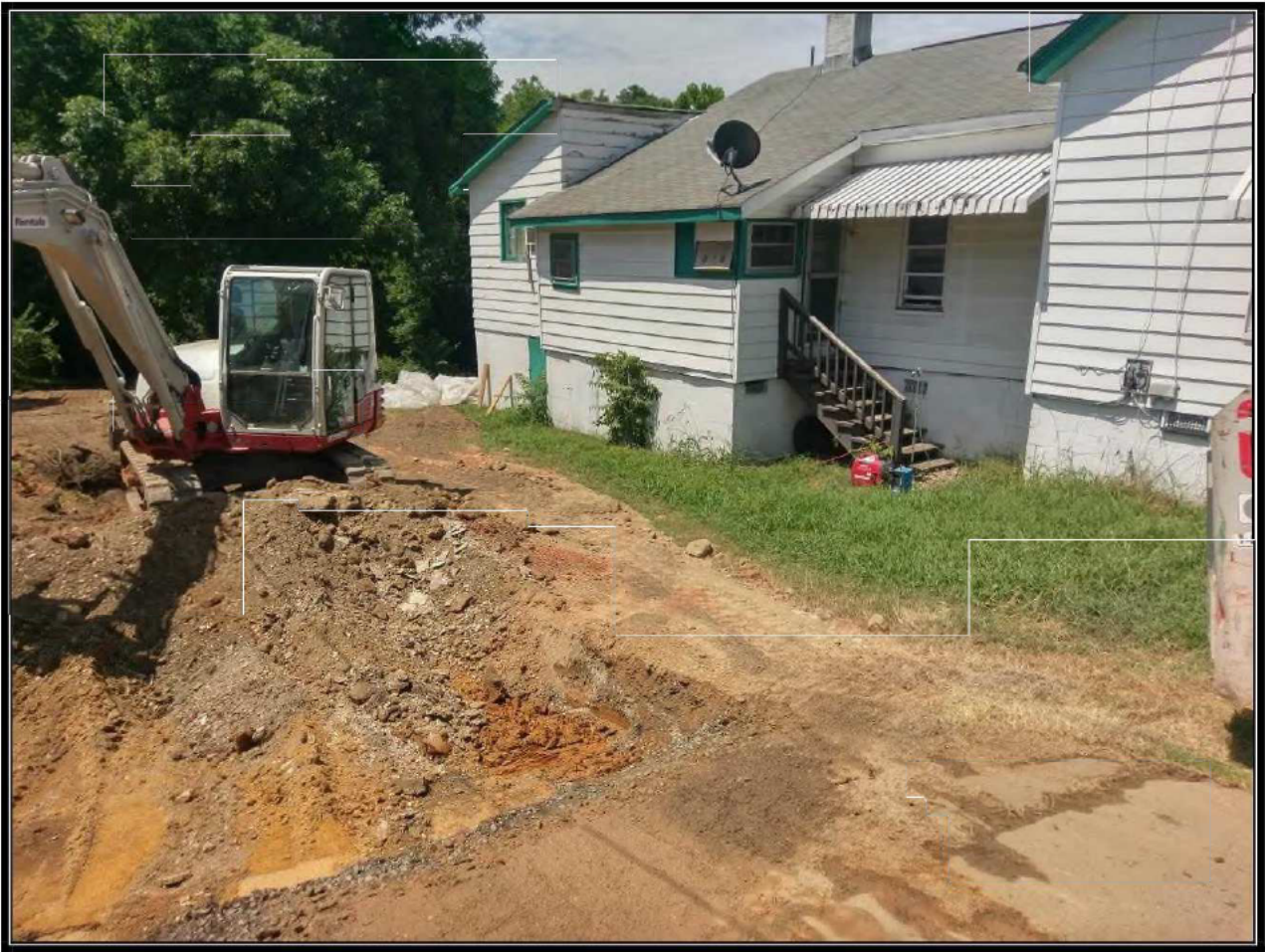
Orientation: North

Date: July 24, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing and red "Danger Asbestos" tape along the subsurface of the excavated area to identify the depth of the excavation and the presence of ACM after the visual inspection conducted by Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor, detected the presence of visible ACM..



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: July 24, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: Perimeter air sampling was conducted by a Tetra Tech START, State of North Carolina-accredited air monitor, to evaluate the effectiveness of engineering and safety controls in preventing the off-site migration of asbestos fibers during removal activities.



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: July 31, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed sod in the excavated areas after backfill and topsoil were in place.



OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southeast

Date: August 4, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed mulch under the surface scraped tree line area after snow fencing, red "Danger Asbestos" tape around the tree line to identify the depth of removal and the presence of ACM, breathable plastic sheeting, and topsoil were in place.